

ABSTRACT OF THE DISCLOSURE

The present invention comprises the steps of forming a bump metal film as a pattern having an opening portion on an area of a seed metal film that corresponds to a connecting pad of a semiconductor substrate, forming a through hole by etching the seed metal film, the connecting pad, and the semiconductor substrate located under the opening portion of the bump metal film while using the bump metal film as a mask, grinding a back surface of the semiconductor substrate, forming an insulating film on a side surface of the through hole, forming a through wiring in the through hole by an electroplating, and forming a metal bump by etching the seed metal film.